

indignation which would greet the suggestion that the government of the Universities of Oxford and Cambridge should be placed in the hands of the municipalities of Oxford and Cambridge respectively to see how indiscreet is a proposal made during the second reading debate to give the control of "all kinds of education from the beginning to the end" to the new Education Committee for London. Such an authority will have at least quite enough to do in building up a properly coordinated and duly unified system of secondary and elementary education, and in continuing the excellent work now being done by the London Technical Education Board. It would be in the highest degree unwise to give the new authority any sort of opportunity to interfere, for example, with the procedure of the Senate of the University of London, though, as has been said, it should be made possible for the new committee to show its sympathy with higher education by contributing to the funds of the University of London and of the metropolitan university colleges.

The university college cannot in any narrow sense be a local institution. To attempt to make it so would be the work of an enemy to higher education; indeed, it would be difficult to imagine anything more likely to play into the hands of our competitors than a disposition to place university education under the control of local authorities. Germany, for instance, would probably be highly delighted if this were done.

At present higher education in the United Kingdom largely depends upon private munificence and upon financial aid from municipal authorities. But, when the Government and the people of this country have been educated to understand that the maintenance of universities on a generous scale is of prime importance to the nation's well-being, it will become evident that the only satisfactory solution of a difficult problem is to regard the adequate provision of higher education as an important function of the State. When this is properly appreciated, the universities will be dependent upon State grants alone; they will no longer find it necessary to solicit financial help from individual munificence, or to secure the voting interest of local councillors with the object of obtaining municipal aid.

NOTES.

At the closing ceremony of the fourteenth International Congress of Medicine, it was announced that the prize of 5000 francs offered by the Moscow municipality had been allotted to Dr. Metchnikoff, of the Pasteur Institute, Paris, and the prize of 3000 francs offered by the Paris municipality to Dr. Grassi, of Rome. The fifteenth congress will be held in Portugal in 1906, when the president will be Prof. Coimbra Costa. Dr. Miguel Bombarda, who will be the general secretary of this congress, is a member of the Royal Academy of Sciences and president of the Royal Academy of Medical Sciences at Lisbon.

THE death is announced of M. Worms de Romilly, formerly president of the French Physical Society, and a member of the committee of the International Association of Electricians.

PROF. E. RAY LANKESTER, F.R.S., has been added to the departmental committee appointed to investigate experimentally and to report upon certain questions connected with the dipping and treatment of sheep.

DR. ROBERT BELL, F.R.S., acting director of the Geological Survey of Canada, is at present in England for the purpose of receiving personally the degree of Doctor of Science which is to be conferred upon him to-day by the

University of Cambridge. Dr. Bell was promoted to the directorship of the Canadian Survey more than two years ago, after being associated with the survey department for forty-six years, but it will surprise all who are not familiar with official routine to know that his appointment has not yet been gazetted, and we presume, therefore, that he does not receive the pay of the appointment.

LADY HUGGINS and Miss A. M. Clerke have been elected honorary members of the Royal Astronomical Society.

THE International Association of Botanists has just held its first congress at Leyden under the presidency of Prof. Goebel, of Munich.

THE *Athenaeum* announces the death of Josef Enzenberger, the director of the scientific station of the German South Pole Expedition. Herr Enzenberger was only thirty years of age.

MR. W. H. PATCHELL has been appointed a member of the committee to inquire into the use of electricity in mines in the place of Mr. James Swinburne, resigned.

THE honorary treasurer of the Cancer Research Fund, under the direction of the two Royal Colleges of Physicians and Surgeons, has received the sum of 1000*l.* from Mr. H. L. Florence for the advancement of the investigation of cancer.

THE *Times* correspondent at Wellington, N.Z., points out that unless the next season should prove more favourable than the last, the *Discovery* will remain fast in the ice, and her ultimate abandonment in the Antarctic is possible. It is imperative, therefore, that the relief ship should return.

SOME additional particulars referring to the British Antarctic Expedition have been brought from New Zealand by the s.s. *Paparoa*, which arrived at Plymouth on Sunday with a member of the *Discovery's* crew, and also one of the crew of the relief ship *Morning*. A remarkable experience is related by a young New Zealander named Hare, who set out from the *Discovery* with a party of officers and men to deposit a record at Cape Crozier. He was separated from the party when returning to the ship, and was buried in a snowdrift. After being asleep in the snow for thirty-six hours he was revived by the warmth of the sun, and was strong enough to rise out of the snow and walk to the ship. With reference to some of the work in terrestrial physics, Mr. Bernacchi says in a letter:—"One of the most typical of the magnetograms for the year 1902-3, with data for reduction, has been sent home in case something should happen to us before the return of the expedition. The seismograph has been working the whole year, but very few shocks and tremors are recorded. Our largest are on May 25 and on September 22, which seems to correspond with your record on April 18. There are some irregularities in the line which might be due to the Guatemalan earthquake. There are some tremors, however, which coincide with your record. From October 3 to October 8 a great many tremors were recorded. I also have a year's observations of atmospheric electricity."

IN connection with the celebration of the centenary of Dalton's enunciation of the atomic theory, to be held at Manchester next week, the following extract from the presidential address delivered by Prof. J. Emerson Reynolds, F.R.S., to the Chemical Society, at the last anniversary meeting, is of interest:—"This year is the centenary of the announcement, in a tentative form, of probably the most fruitful and valuable of all scientific hypotheses—Dalton's Atomic Theory. On October 21, 1803, Dalton read a paper

"On the Absorption of Gases by Water and other Liquids" before a select audience of nine members of the Literary and Philosophical Society of Manchester. He appended to that paper a statement which, according to Sir Henry Roscoe and Dr. Harden ('A New View of the Origin of Dalton's Atomic Theory,' Macmillan, 1896), is the first published indication of the atomic theory, though the paper was not circulated in the *Manchester Memoirs* until November, 1805. Thus, just 100 years ago, the conception of the discrete nature of matter was formulated, and used to explain the facts then known as to the constant composition of chemical compounds, and the laws discovered by Dalton as to their formation in definite and multiple proportions. This germ of the molecular theory of matter, which now pervades all thought in chemistry and physics, arose, as Nernst truly says, 'by a single effort of modern science, like a Phoenix from the ashes of the old Greek philosophy.' Therefore, physicists as well as chemists are interested in an event of the highest significance in the development of both branches of science. I am glad to know that a special celebration will shortly be held in that great city which claims Dalton as her illustrious son."

THE Rumford premium of the American Academy of Arts and Sciences, consisting of a gold and a silver medal, has been awarded to Prof. George E. Hale, director of Yerkes Observatory, in recognition of his researches in solar and stellar physics, and in particular for the invention and perfection of the spectroheliograph.

AN International Exhibition of Hygiene, Life-saving, Sports, Fishery, and Ambulance is to be held in Paris from September to November, 1904, at the Grand Palais des Champs-Élysées. Full particulars may be obtained on application to the Commissaire Général, Exposition Internationale de 1904, 3 rue des Moulins, Paris.

THE *Lancet* reports that a new building is to be erected in Manila to provide laboratory space for the chemical and biological laboratories and the serum institute. The building will be divided into sixty rooms, and will be 216 feet long and 60 feet wide, having two storeys. The plans of the building have been drawn so as to accommodate all the work within one building, one half of which will be occupied by the chemical and the other half by the biological laboratory.

WE learn from *Science* that Harvard University, New York University, and the Bermuda Natural History Society unite in inviting botanists and zoologists to spend six weeks in the temporary biological station provided at Bermuda. The two possible dates of sailing from New York are June 20 and July 4. Circulars and detailed information will be supplied on application either to Prof. C. L. Bristol, University Heights, New York City, or to Prof. E. L. Mark, 109 Irving Street, Cambridge, Mass.

WE learn from the *British Medical Journal* that the Croonian lectures before the Royal College of Physicians of London will be delivered this year by Dr. C. E. Beever on June 9, 11, 16 and 18. The subject will be muscular movements and their representation in the central nervous system. The first course of FitzPatrick lectures will be delivered by Dr. J. F. Payne on June 23 and 25. He has chosen for his subject "English Medicine in the Anglo-Saxon and Anglo-Norman Periods."

A CORRESPONDENT points out that in each of the embroidered designs reproduced in a notice of East Siberian decorative art (April 16, p. 560) it is possible to distinguish

a man's face quite as clearly as the conventional cocks which are supposed to be grouped about the central axis.

A CONGRESS commemorative of the fiftieth anniversary of the foundation of the Royal Photographic Society will be held next week. The congress will be opened on Tuesday, May 19, at the New Gallery, Regent Street, at 8.30 p.m., when the president will deliver an address. This will be followed by a *conversazione*, when the president, Sir William Abney, and council will receive the Society's members and guests. On Wednesday, May 20, at the Society's house, there will be a meeting at which papers will be read, and in the evening there will be a dinner. In connection with the congress there will be a special exhibition at the Society's rooms of objects having interest in the history of photography. The council hopes that this exhibition will represent the various stages of photography from its infancy to the present day. The commemoration of the jubilee will not cease with the congress of which details are given above. It is intended that the annual exhibition shall be distinguished by features which will mark the present year as one of more than usual significance. There will be a special invitation pictorial section in addition to the established pictorial section, and the scientific and technical section will be entirely collected by direct invitation, both having for their object the illustration of the progress and present position of photography.

ON May 5 Lord Avebury, the president of the Selborne Society, took the chair at the annual meeting and *conversazione*. He alluded to several of the many lines of work upon which the association is engaged, to wit, the interest which it is taking in the Home Counties Nature-Study Exhibition, the bird sanctuaries arranged for, and the protection of plants. Lord Avebury claimed that near London plants now needed more looking after than birds, and quoted instances from his own experience; he also pointed out how easy it was for country clergymen to follow in the steps of the great Gilbert White. Sir John Cockburn also alluded to plants and the advantage of the study of flowers to children, saying that in this respect we might all well be children. As chairman of the Nature-Study Exhibition held last year, he wished all success to the new undertaking mentioned by Lord Avebury. Sir George Kekewich said that of all the objects of the Selborne Society, he would put nature-study first. Dr. Bowdler Sharpe gave an illustrated lecture on Selborne, and Mr. Andrew Pears, who recently bought the Wakes, offered a cordial welcome to the members of the Society who are to visit Selborne in June next.

THE freedom of the city of Rome was conferred upon Mr. Marconi last Thursday by Prince Colonna, Syndic of Rome. The occasion was marked by much enthusiasm; a conference was held in the afternoon and a banquet in the evening, and from all sides Italians welcomed the opportunity of doing honour to their distinguished countryman. Since then Mr. Marconi has been conducting experiments in Rome and the neighbourhood with, it is reported, very successful results; before leaving Rome he intends to select a site for the high-power station which is to be erected near the city.

TELEGRAMS from Ottawa state that Mr. Fielding, Dominion Minister of Finance, speaking in the House of Commons with reference to the Marconi system, said that the system had not been as successful as had been expected, and that the Government did not propose to make any further contributions towards it. It will be remembered

that last year the Canadian Government made a contribution of more than 16,000*l.* towards the cost of establishing Transatlantic communication. The Canadian Government is, however, still confident of the ultimate success of the system. The delay in getting the Canadian station into successful commercial operation is said to be due merely to a breakdown of a mechanical nature. It seems as if some other difficulties are also being encountered, as one does not hear of any Transatlantic signalling from either of the two American stations.

THE Great Western Railway, following the examples of the London and South Western and North Eastern companies, has decided to run automobile cars on some sections of its line. This method of providing for a more frequent service has been necessitated by the competition of electric tramways, and affords further evidence in support of the view that electric traction is likely to bring about in time a complete revolution in our methods of locomotion. The motor-cars to be used by the Great Western are to be steam driven. A notable feature of the scheme is that provision is to be made for frequent stoppages between the stations to pick up passengers; it is proposed that the cars should stop at all the level crossings—of which there are four on the section between Chalford and Stonehouse, where the first experiment is to be made—and also, if it is feasible, at any points at which foot-paths give access to the line. It is hoped in this way to organise a successful competition with the electric tramway which has been projected and sanctioned parallel to this part of the line. The superiority of electric traction for working of this kind is so well known that one may reasonably expect the Great Western Railway will find it advisable before long to get rid of the steam motor-cars and provide for electrical working over the section, which may pave the way, in the manner that many have prophesied, for the ultimate complete conversion from steam to electricity.

THE electrification of our steam-driven railways proceeds apace; the inauguration of the electrical working of the Mersey Railway, which took place a few days ago, is an event which will probably before long be paralleled by many similar inaugurations all over the country. To the Mersey Railway then belongs, we believe, the honour of being the first steam railway in Great Britain to undergo conversion. Special conditions have in this case hastened the change; the long tunnel under the river made a frequent train service impossible without expensive outlay in ventilation, which the company could not afford. Electrical working was therefore decided upon in 1900, and a contract made with the British Westinghouse Co. to carry out the conversion in July, 1901. In considerably less than two years the work has been completed, in spite of the fact that it involved relaying the whole of the five miles of permanent way, together with putting down the two additional lines of rails to serve as conductors (an insulated return being used) and the erection of a power-house and plant, &c. The tunnel has been cleaned and lighted throughout, and electric lighting installed at all the stations; electricity has, in fact, been adopted for almost every detail of the working. A good deal of the work is naturally of American design, and some of it of American construction. It is to be hoped that as we hear more of other railways being converted, we shall hear less of their using foreign machinery; it is probably inevitable that in the not very distant future our whole railway system will be "electrified," but it is not necessary that this word should be synonymous with "Americanised."

WE regret to announce the death last week of Mr. Clarence Bartlett, who only recently retired from the post of superintendent of the Zoological Society's Gardens in the Regent's Park, which he had held since the death of his father, whom he succeeded, in 1897. Mr. Clarence Bartlett was the second son of Mr. A. D. Bartlett, and was, we believe, brought up in the service of the Zoological Society. During the early "sixties" he was appointed assistant superintendent (and subsequently clerk of the works) to the Gardens, and in 1866 he was dispatched by the council to Surinam to bring home a young manati, which died a few hours before the vessel arrived at Southampton. A more important mission fell to his lot in 1875, when he was granted special leave by the council in order to accompany, as zoological collector, His Majesty the King (then Prince of Wales) to India. From this tour he returned the following year, bringing home in first-rate condition a large number of living mammals and birds, which were housed in the Society's Gardens. Among these was the elephant "Jung Pershad," which lived for many years in the menagerie, and the mounted skin of which is exhibited in the Natural History Museum, where, by the way, it has just been transferred from the zoological to the geological department, in order that it might stand side by side with the skeletons of its extinct relations. Mr. Bartlett appears never to have contributed anything to the scientific publications of the Society. Soon after the resignation of the secretary in the autumn of last year, ill-health and other reasons rendered it advisable that Mr. Bartlett should retire on a pension, but when he left his house in the Gardens it was apparent to all that he had little prospect of living to enjoy this reward of his services.

THE Parliamentary Report of the Meteorological Council for the year 1901-2 has recently been issued in the same form as in the previous year. Among the appendices we find (1) correspondence with the London County Council respecting an inquiry into the occurrence and distribution of fogs in London; the report of the inquiry has been already published. (2) A comprehensive statement of provisions for the supply of information to the public; and (3) an interesting summary of conspicuous meteorological occurrences (with two plates). An application was received from the Royal Meteorological Society to assist in providing means in carrying out experiments on the exploration of the upper air by means of kites. In order to facilitate this important investigation the Council agreed to provide the instruments for the establishment of a base station. At the request of the Registrar-General the Council has undertaken the supply of meteorological tables for his weekly, quarterly and annual reports which had been for many years satisfactorily prepared by Mr. James Glaisher, at great personal labour. A considerable number of returns has been received through the Foreign Office from African Protectorates, and the Council has under consideration the publication of an annual summary of the observations from these and other colonial stations; the reduction and tabulation of these important data will entail much additional work and expense. In order to meet the constantly increasing demands upon the public usefulness of the department, both as regards land and ocean meteorology, some revision of the organisation of the various branches has been necessary, including the opening of the office at 8 a.m. for the service of meteorological telegraphy; the Parliamentary grant, however, remains at the same figure as heretofore.

MR. THOMAS H. MEANS, of the U.S. Department of Agriculture, was recently sent to Egypt by the U.S. Secretary

of Agriculture to investigate and report upon the methods of reclaiming alkali lands, with particular reference to the conditions in America. The abandonment of many acres of once fertile land at the time of the Arabian conquest, and the change from the annual flooding to the perennial system of irrigation through canals, has caused the rise and spread of alkali over vast areas in Egypt. The reclamation of large tracts of this kind is being taken up as a business enterprise by British engineers, and the work has proved a large financial success. The conditions met with and the methods used are set forth by Mr. Means in *Bulletin* No. 21 of the Bureau of Soils, U.S. Department of Agriculture.

IN the New Year's number of NATURE there appeared an account of a basil, *Ocimum viride*, a plant which is known to the natives of Nigeria as a protection against mosquitoes. Captain Larymore, by whom this information was first obtained, in a recent letter to the *Times* mentions that he has brought home a plant which he has presented to the authorities of the Kew Gardens, and that it may be seen there. He also states that the natives believe in its efficacy when taken as an infusion in cases of malarial fever. Further evidence is offered in another letter to the *Times* by Sir George Birdwood as to the knowledge widely spread among the Hindus of these qualities of the basils, which occur wild, and are generally cultivated in India. Thus, during the formation of the Victoria Gardens in Bombay, the workmen were attacked both by mosquitoes and malaria, when upon the recommendation of the Hindu manager basil plants were placed round the gardens, with the result that the unhealthy nature of the locality was effectually changed.

PROF. HOYLE (*Manchester Memoirs*, vol. xlvii. No. 9) points out that the cuttle-fish described as *Loligo eblanae* is identical with the one subsequently named *Todaropsis veranyi*, consequently the name of the species should be *T. eblanae*.

IN the January issue of the *Proceedings* of the Philadelphia Academy Messrs. Anderson and Grinnell draw attention to the birds of the Siskiyou Mountains, California, on account of the fact that they exhibit a mixture of types characteristic of two distinct faunas, namely, the moist coast fauna and the dry Sierran fauna.

FROM a distributional point of view, the occurrence in the Philippines of an indigenous representative of the Australasian gum-trees is a matter of considerable interest, and it is therefore satisfactory to find that, according to Mr. J. H. Madden (*Proc. U.S. Nat. Mus.*, No. 1327), *Eucalyptus nandiniana*, which is typically from New Britain, also occurs in the aforesaid islands.

AMONG the articles in the *Journal* of the Quekett Microscopical Club, attention may be directed to one by Mr. W. H. Harris on the "dentition" of flies. Although the various forms assumed by the "teeth" of these insects have not escaped investigation, they seem to have attracted but little attention in this country, and the author has therefore done well in pointing out the possibilities of this branch of study. An excellent plate accompanies the paper, in the course of which Mr. Harris expresses some doubts as to whether the true function of the canals known as pseudo-tracheæ is to convey liquid-food.

THE position in which different birds carry their legs in flight forms the subject of an interesting paper by Captain Barrett-Hamilton in the *Zoologist* for April. In all birds it appears that the tibia, during continuous flight, must occupy a nearly horizontal position, pointing directly back-

wards. The position of the metatarsi, on the other hand, depends on whether the legs are required to act as a rudder. During flight, birds must have an efficient rudder, and in cases where the metatarsi are very long, as in the heron, and must of necessity be directed backwards, the legs serve this function. On the other hand, in many strong and rapid flyers, especially those which make sharp turns and twists, the steering is effected by means of a long, and frequently forked, tail. Captain Hamilton gives a list of birds exhibiting these correlations, but points out that our knowledge of the subject is still very imperfect, and that careful observation of a large number of species is required. With the exception of the kites and fork-tailed kites, the birds of prey form an exception to the rule.

A USEFUL summary of our present knowledge of leprosy, its ætiology and prophylaxis, is given by Mr. George Pernet in the April number of the *Quarterly Review*. The author discusses the introduction into, and prevalence of, leprosy in the British Isles in the middle ages, the effects of the segregation of lepers, the characters of the disease and of the leprosy bacillus, and the danger of the introduction of the disease into other countries through the importation of coolie, Chinese, or other labourers belonging to races afflicted with this scourge.

AN important report upon the ætiology and pathology of beri-beri has been published by Dr. Hamilton Wright. A specific organism has so far not been discovered, and Dr. Wright has also failed to isolate one. His theory of the nature of the disease is that it is due to a specific micro-organism which remains dormant in certain localities, but that, having gained entrance to the body by the mouth, it multiplies locally in the digestive tract, producing toxins which on absorption into the general circulation cause the various symptoms characteristic of the disease. It is noteworthy also that monkeys kept in a jail where beri-beri was prevalent suffered from a condition resembling the disease in man.

A NEW pattern of electric lamp is being put on the market by the Linolite Company. The filaments, instead of being in ordinary bulbs, are enclosed in short straight tubes about nine inches long; the filament is given a small curl in the middle to allow for expansion. These tubes are mounted end to end in a metallic casing, which serves as a reflector, and also carries the leads and the sockets into which the lamps fit. There is thus produced a single line of light, which is very suitable for certain forms of illumination, such as shop-window lighting, lighting by reflection from the ceiling, decorative illumination, and the like. The lamps are made for all ordinary voltages, and of the same candle-power and efficiencies as ordinary lamps; they are run in parallel for voltages up to 130, but for voltages above 200 the lamps are run in pairs, the two lamps of each pair being in series. The system has been tried on several occasions recently with very satisfactory results.

AT a recent meeting of the Academy of Sciences of Vienna, Prof. Molisch, of Prague, communicated a paper upon phosphorescent bacteria. He has been able to photograph the colonies of a phosphorescent micrococcus by means of its own light. By inoculating large glass flasks of 1-2 litres capacity containing a suitable culture medium with the organisms, a "bacterial lamp" is obtained with which it is quite possible for an observer at a distance of one to two metres to read a thermometer or to see the time of a watch. On a dark night the "bacterial lamp" is visible at a distance of more than sixty paces. It is suggested that such cultures of phosphorescent bacteria

might be employed in powder magazines, or for attracting fish, as the flask might be sealed up and lowered into the water. Under suitable conditions the phosphorescent properties of the cultures last for two to three weeks. It is to be noted that Mr. J. E. Barnard, of the Jenner Institute, some time ago similarly photographed cultures of phosphorescent bacteria, and that at a soirée of the Royal Society two years ago, Prof. Macfadyen and Mr. Barnard exhibited a fine series of cultures of phosphorescent micro-organisms.

THE new issue of the "Psychological Index, a Bibliography of the Literature of Psychology and Cognate Subjects for 1902," published in connection with the *Psychological Review*, has been compiled by Prof. H. C. Warren, of Princeton University, with the cooperation of M. J. Philippe and Dr. W. H. R. Rivers. It includes the titles of original publications in all languages, together with translations and new editions in English, French, and German.

THE third separate issue of the *Annuaire météorologique* is that for 1903, published by the Royal Observatory of Belgium under the supervision of M. A. Lancaster, the director of the Belgian meteorological service. Previous to 1900 there was a single annual publication devoted to astronomy and meteorology. M. Lancaster contributes to the present volume an elaborate article running to 130 pages on the force of the wind in Belgium; it contains an array of useful statistics and several interesting curves.

THE Geologists' Association has arranged an excursion to North Staffordshire for the Whitsuntide holidays. Stoke is to be made the centre from which geological excursions will take place. The members from London will leave Euston on Friday evening, May 29, and return on the following Wednesday evening. Notice should be sent to Mr. E. P. Ridley, Burwood, Ipswich, the excursion secretary, before May 15 by all who intend joining the excursion. An interesting programme of geological work has been arranged, and the daily visits should be enjoyable and instructive.

THE April number of the *Essex Naturalist*, the journal of the Essex Field Club, contains several sensible proposals for a photographic and pictorial survey of Essex, by Mr. A. E. Briscoe; an article on work in the field amongst the fungi, with additions to the flora of Epping Forest made at the fungus foray, 1902, by Dr. M. C. Cooke; and a paper by Messrs. A. S. Kennard and B. B. Woodward on the non-marine Mollusca of the River Lea alluvium at Walthamstow. The journal contains much other interesting material and a number of good illustrations.

MR. JOHN MURRAY has published a third edition of Mr. W. Robinson's "Alpine Flowers for Gardens. Rock, Wall, Marsh Plants, and Mountain Shrubs," which appeared first in 1870. The book has been revised, and should interest all lovers of horticulture in those plants which grow naturally on all high mountain-chains. Since the author states, in the prefatory note to this edition, that "there is not a garden, even in the suburbs of our great cities, in which the flowers of alpine lands might not be enjoyed," the addition of these mountain species to the garden plants usually cultivated in this country should greatly add to the interest of the amateur gardener's work.

THE additions to the Zoological Society's Gardens during the past week include a Black-eared Marmoset (*Hapale pentillata*) from South-east Brazil, presented by Miss Ruby Ray; a Lesser Black-backed Gull (*Larus fuscus*) from Port

Said, presented by Dixon Bey; a Capybara (*Hydrochoerus capybara*), a Brazilian Cariama (*Cariama cristata*), a Ypecaha Rail (*Aramides ypecaha*) from South America, presented by Colonel Sir T. H. Holdich, C.B.; a Yellow Baboon (*Papio cynocephalus*) from Africa, two Maholi Galagos (*Galago maholi*), a Leopard Tortoise (*Testudo pardalis*) from South Africa, an Indian Rat Snake (*Zamenis mucosus*), two Indian River Snakes (*Tropidonotus piscator*) from India, an Alligator Terrapin (*Chelydra serpentina*), two Alaska Geese (*Bernicla minima*) from North America, two Ross's Snow Geese (*Chen rossi*) from Antarctic America, three Lesueur's Water Lizards (*Physignathus lesueuri*), a Cunningham's Skink (*Egernia cunninghami*), a Gould's Monitor (*Varanus gouldi*), two Limbless Lizards (*Pygopus lepidopus*) from Australia, a Slender Loris (*Loris gracilis*) from Ceylon, two Large Greaved Tortoises (*Podocnemis expansa*) from the Amazons, three Starred Lizards (*Agama stellio*), a Spiny-tailed Uromastix (*Uromastix acanthinurus*) from North Africa, a Mailed Uromastix (*Uromastix loricatus*) from Persia, deposited.

OUR ASTRONOMICAL COLUMN.

COMET 1903 *b*.—From observations made at Windsor, N.S.W., on April 26, 29, and May 1, and communicated by telegraph to the Kiel Centralstelle, Herren M. Ebell and H. Kreutz have calculated the following elements and ephemeris for the comet discovered by Mr. Grigg on April 17:—

Elements.

T = 1903 March 25^h 54^m 86^s Berlin M.T.

$$\left. \begin{aligned} \omega &= 186^\circ 40' \cdot 7 \\ \Omega &= 213^\circ 14' \cdot 5 \\ i &= 66^\circ 29' \cdot 6 \end{aligned} \right\} 1903^\circ.$$

$$\log q = 9 \cdot 71054.$$

Ephemeris for 12h. M.T. Berlin.

| 1903. | a | | | δ | | | log Δ | Brightness. |
|--------|-----|------|----|-----|------|-------|-------|-----------------|
| | h. | m. | s. | | | | | |
| May 13 | ... | 5 36 | 33 | ... | -22° | 2' 8 | ... | 0.1668 ... 0.51 |
| 17 | ... | 5 57 | 59 | ... | -22° | 53' 9 | ... | 0.1779 ... 0.43 |
| 21 | ... | 6 18 | 40 | ... | -23° | 34' 9 | ... | 0.1905 ... 0.37 |
| 25 | ... | 6 38 | 34 | ... | -24° | 7' 2 | ... | 0.2042 ... 0.31 |
| 29 | ... | 6 57 | 34 | ... | -24° | 32' 2 | ... | 0.2190 ... 0.27 |
| June 2 | ... | 7 15 | 40 | ... | -24° | 51' 2 | ... | 0.2345 ... 0.23 |

The brightness at time of discovery is taken as unity (*Kiel Circular*, No. 59).

A REMARKABLE ALGOL VARIABLE.—Prof. E. C. Pickering, writing to the *Astronomische Nachrichten*, No. 3866, states that the new Algol variable, 4.1903 Draconis, discovered by Madame Ceraski, is of unusual interest on account of its short period and great range of variability.

An examination of the plates obtained with the Draper telescopes shows that the period is 1d. 8h. 34.7m., and the range of variability 2.4 magnitudes. About half an hour before minimum the brightness decreases at the rate of between 2 and 3 magnitudes per hour, a rate probably greater than any other hitherto discovered. A minimum was predicted and observed at Harvard on March 19 at 16h. 24m. G.M.T.

NEW VALUE FOR THE SOLAR PARALLAX.—In view of the probable publication, in the near future, of the results obtained from observations of Eros, Herr B. Weinberg, of the University of Odessa, has collected about 130 of the more trustworthy values for the solar parallax as obtained by different observers, using various methods, since 1825, and has discussed them in a paper communicated to No. 3866 of the *Astronomische Nachrichten*. From the discussion he has obtained

$$8'' \cdot 8004 \pm 0'' \cdot 00243$$

as his final value for this constant.